

In the claims:

Please cancel claim 2. Please enter the claims as follows:

§2
1. (Twice amended) A molecular adjuvant for enhancing an immune response to an immunogen comprising:
a targeting ligand having binding affinity for a receptor present on an antigen presenting cell, said receptor being of a type that is internalized upon binding of a ligand and that transmits a signal in the antigen presenting cell that stimulates antigen processing and presentation by the antigen presenting cell, said targeting ligand being covalently linked to said immunogen, whereby binding of said molecular adjuvant to said antigen presenting cell receptor activates said antigen presenting cell, effecting delivery of said immunogen to an antigen presenting pathway of said antigen presenting cell.

§3
3. (Amended) A molecular adjuvant as claimed in claim 1, wherein said targeting ligand binds specifically to a receptor selected from the group consisting of C5a receptor, IFN-gamma receptor, C3d receptor, FcγRI receptor, and FcεRII receptor.

§4
6. (Amended) A molecular adjuvant as claimed in claim 1, comprising SEQ ID NO:2.

§5
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25. (Amended) Antibodies to a selected immunogen, wherein the antibodies are produced by a method comprising the steps of:
a) immunizing an animal with an immunogenically effective amount of the molecular adjuvant of claim 1, wherein the molecular adjuvant comprises the selected immunogen; and
b) recovering the antibodies from serum of the animal.

REMARKS

The Official Action dated November 8, 2000 has been carefully reviewed. In view of the amendments presented herewith and the following remarks, Applicants respectfully request favorable reconsideration and allowance of the application.

Status of the specification and claims:

At the outset, Applicants note the examiner's statement at page 2 of the Action that Page 1 of the specification should be amended to properly identify the priority applications. However, this amendment to the specification was made in Applicants' response to the previous Official Action (response to Paper No. 11 dated June 6, 2000); accordingly, that amendment has not been made herein.

Claims 1-17 and 25 are pending in this application. Claims 8 and 9 have been re-joined with claims 1-17, following withdrawal of a requirement for election of species.

All rejections issued in the first Official Action have been withdrawn.

Claims 1, 2, 6, 7, 10-14, 16 and 17 are newly rejected under 35 U.S.C. §112, first paragraph, for alleged lack of adequate written description.

Claim 25 has been rejected under 35 U.S.C. §112, second paragraph, for alleged indefiniteness in being dependent upon a canceled claim.

Claims 3-5, 8, 9 and 15 are objected to as being dependent upon a rejected base claim, but would be deemed allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims.

Amendments to the specification and claims:

The specification has been amended to correct three typographical errors on page 9. Specifically, the parentheses surrounding the terms "C3d", "FcγRI" and "FcεRII" have been enlarged to include the term "receptor", as is accurately set forth at pages 16-17 of the specification.

Claim 1 has been amended to further define the type of characteristic determinant

on antigen presenting cells to which the recited molecular adjuvant binds to achieve the desired effect of enhancing an immune response to an immunogen. Support for the amendment to claim 1 is found in the specification at page 15, lines 18-23.

Claim 2 has been canceled. Claim 3 has been amended to depend from claim 1 and to correct typographical errors similar to those found at page 9 of the specification. Claim 6 has been amended to clarify that the sequence recited therein (SEQ ID NO:2) represents the entire molecular adjuvant. Claim 25 has been amended so as to no longer be dependent upon a canceled claim.

Applicants respectfully submit that the above-summarized claim amendments overcome all objections and rejections set forth in the November 8, 2000 official action. Support for Applicants' position with respect to the rejection under 35 U.S.C. §112, first paragraph, is set forth below.

Rejection under 35 U.S.C. §112, first paragraph:

Claims 1, 2, 6, 7, 10-14, 16 and 17 stand rejected under 35 U.S.C. §112, first paragraph, for alleged lack of adequate written description. Specifically, the examiner asserts that the specification does not adequately describe a molecular adjuvant wherein the targeting ligand has binding affinity for any characteristic determinant of an antigen presenting cell because the definition of "characteristic determinants" includes determinants that are not directly involved in the antigen capture/processing/presentation pathway and there is no descriptive support in the specification for the molecular adjuvants to be effective when binding such uninvolved determinants. The examiner states that the claims should be limited to molecular adjuvants that bind receptors specifically disclosed in the specification.

Applicants have amended claim 1 so that it now clearly recites that the characteristic determinant on the antigen presenting cell is one that is involved in the antigen capture/processing/presentation pathway. As amended, claim 1 is adequately supported by the written description, particularly as found at pages 15 - 17 of the specification. At page 15, the specification recites specific criteria for selecting receptors preferred for targeting in the present invention. Non-limiting representative examples are described in detail at page 15 - 17, along with the characteristics of these receptors that makes them suitable for use in the present

invention. These representative examples and description of suitable receptors set forth in the specification clearly allow a person of ordinary skill in the art to recognize that Applicants invented what is presently claimed in claim 1 and claims 6, 7, 10-14, 16 and 17 dependent therefrom. Hence, the written description requirement of 35 U.S.C. §112, first paragraph, is met and Applicants respectfully request withdrawal of this rejection.


Conclusion:

In view of the amendments presented herewith and the foregoing remarks, Applicants submit that the specification and claims as presently amended have overcome all objections and rejections set forth in the November 8, 2000 Official Action, and that the claims are in condition for allowance. Applicants therefore respectfully urge withdrawal of those objections and rejections, and that this application be passed to issue.

Respectfully submitted,

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